CLAIMS:

1. A lamp comprising a lamp bulb (1), on the surface of which at least one interference filter (3) is at least partially located, wherein at least this interference filter (3) comprises several layers, wherein the layer structure comprises alternating layers (3.1) with a higher refractive index and layers (3.2) with a lower refractive index, wherein at least the outer layer and/or at least one inner layer of the interference filter (3) comprises a protective layer (4) to reduce thermal and/or intrinsic stresses, and wherein the thickness of the protective layer (4) or protective layers (4) has a value below 40% of the value of all other layers with the lower refractive index.

2. Lamp as claimed in claim 1, characterized in that the materials used in the protective layer (4), the layer (3.2.), and the lamp bulb (1) are substantially comparable.

3. Lamp as claimed in claim 1, characterized in that the layer (3.2) of the interference filter (3) with the lower refractive index preferably comprises mainly SiO_2 and that the second layer (3.1) of the interference filter (3) comprises a material which has a higher refractive index than SiO_2, preferably mainly zirconium oxide (ZrO_2).

4. Lamp as claimed in claim 3, characterized in that the second layer (3.1) comprises a material from the group of titanium oxide, tantalum oxide, niobium oxide, hafnium oxide, silicon nitride, and particularly preferably zirconium oxide ZrO_2, or a mixture of these materials.

5. Lamp as claimed in claim 1, characterized in that the preferred lamp is a high intensity discharge lamp or a halogen lamp.

6. Lamp as claimed in claim 1, characterized in that the one protective layer (4) or all protective layers (4) is or are arranged within the interference filter (3).

7. Illumination unit with at least one lamp as claimed in any one of the preceding claims.